FILE	HOTATIONS			**************************************	Mark Street	
(1), (s)		V				
7 4 5	h NID FA				Chief	
	ed Oo \$ it Shool				to Field Office	
	ion Map Planed Indexed			Approval M	The state of the s	**************************************
7,111	für State ar Fei		on the	Disappreval		•
	COMPLETIO					
	Date Well Con	781		Lacetica ins	pacted	
	DW W	W TA.	•	Band Yelwase	_	
	GW Q	S PA.		State of	Fee Land	
	**************************************		LOGS F	LED		
1-4	Dritter's Log.	····		ider i Zali in in Li		
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	· · · · · ·	[No. ]		Company of the second		4
5			1.7		R-N	dicro
4.	Lat	Mi-L	Senis		hers	
_	- CF					



May 29, 1980

U. S. Geological Survey
E. W. Guynn, District Engineer
1745 West 1700 South
2000 Administration Building
Salt Lake City, Utah 84138

Re: Filing NTL-6 and A.P.D. Form 9-331C
William C. Kirkwood
#44-15 Garfield
599' FSL & 4497' FWL
Sec. 15 T31S R15E
Garfield County, Utah

Dear Mr. Guynn:

Enclosed are three copies of the NTL-6 program and A.P.D. Form 9-331C for the above-referenced well location.

Please notify us when you have arranged a time with the B.L.M. to inspect the site, in order that Larry Becker, our surveyor who did the ground work for this application may be present during the inspection.

The archaeological report is not included with the NTL-6 but will be forwarded to your office, and to the B.L.M. office, from our Archaeological Division.

Sincerely yours,

POWERS ELEVATION

Connie L. Frailey

nnie L. Frailey

CLF:mc Enclosurs

me a resulted it formatte the latest the latest terminal terminal

cc: William Vandeventer, William C. Kirkwood, Casper, Wyoming Larry Becker, Powers Elevation, Grand Junction, Colorado Dirt-Contractor

Powers Elevation Suite 1201 Cherry Creek Plaza 600 So. Cherry Street Denver, Colorado 80222

RE: Filing NTL-6 and A.P.D. Form 9-331C William C. Kirkwood #44-15 Garfield 599' FSL & 4497' FWL Sec. 15 T31S R15E Garfield County, Utah

#### Gentlemen:

This is to confirm our understanding with you that Powers Elevation is authorized to act as our agent in the following capacities:

- A. In surveying, staking, and preparing and filing necessary applications, permits and compliance programs, including complete NTL-6 reports, for the above-referenced project.
- B. In accepting on our behalf any changes to location, proposed facilities and/or surface use plan and compliance program requested at on-site inspections, when we are unable to have a Company representative present. Such changes will then be binding upon us or designated Operator.

POWERS' responsibilities do not include construction of location or supervision of drilling, completion or rehabilitation operations.

Company	Kickward oil & Gas	
	1+	
by:	Stor C Klow	
Title:	Coologue	
Date: _	5/2/80	



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Henry Mountain Resource Area P.O. Box 99 Hanksville, UT. 84734

June 30, 1980

George Diwachak: USGS Conservation Division 2000 Administration Building 1745 W. 1700 S. Salt Lake City, UT. 84104

Re: Kirkwood Oil

Proposed Drilling Project

T. 31 S., R. 14 E. and T. 31 S., R. 15 E.

Dear Mr. Diwachak:

The following information concerns surface protection stipulations to be incorporated into the APD's for the above referenced drilling project.

Site specific stipulations for each of the eight locations include the following:

WELL NAME	LOCATION	LEASE NUMBER	
1- Magnum 23-8	NE4SW48 T. 31 S., R. 15 E.	U-21478	

- a The site will be moved roughly 400 ft. to the east to a point where it's coordinates in section 8 are 1900' FEL and 1790' FSL.
- b The drill site will not be bladed.
- c A small reserve pit will be constructed to hold cuttings.
- d Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

SPECIES	LBS/ACRE
Shadscale	3
Indian ricegrass	3
Galleta grass	2



Save Energy and You Serve America!

- e All trash and debris will be carried off site and disposed of in a BLM approved location.
- f Access to the site will be on an existing road. Blading will be kept to a minimum, old rocks and debris will be removed and no new cuts will be authorized.
- 2 White Rim 44-4 SE¼SE¼SE¼ 4, T. 31 S., R. 15 E. U-21083
  - a The site will be moved from the SESESE, to the NESESE of section 4.
  - b The drill site will not be bladed.
  - c A small reserve pit will be cut to hold cuttings.
  - d Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

SPECIES	LB/ACRE		
Shadscale	3		
Indian ricegrass	3		
Galleta grass	2		

- e All trash and debris will be carried off site and disposed of in a BLM approved location.
- f Access to the site will be on an existing road. Blading will be kept to a minimum.

## 8 + Carrield 44-15 SELSEL 15, T. 31 S., R. 15 E. U-21037

- a The drill site will not be bladed.
- b A small reserve pit will be constructed to hold cuttings.
- c Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

SPECIES	LB/ACRE
Shadscale	3
Indian ricegrass	3
Galleta grass	2

- d All trash and debris will be carried off-site and disposed of in a BLM approved site.
- e Access to the site will be confined to the existing road. Blading will be kept to a minimum by simply removing any rocks and debris

blocking the road and by filling in any washed out areas.

- 4 Winfield 21-15 NE¼NW¼ 15, T. 31 S., R. 15 E. U-21037
  - a The drill site will not be bladed.
  - b A small reserve pit will be constructed to hold cuttings.
  - c Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

SPECIES	LB/ACRE
Shadscale Indian ricegrass	3 3
Galleta grass	3 2

- d All trash and debris will be carried off-site and disposed of in a BLM approved site.
- e Access to the site will be confined to the existing road. Blading will be kept to a minimum by removing only those rocks and debris blocking the road and by filling in any washed out areas.
- 5 Remington 14-15 SW4SW4 15, T. 31 S., R. 15 E. U-21037
  - a The drill site will not be bladed.
  - b The two rock cairns on the access road will be left intact.
  - c A small reserve pit will be constructed to hold cuttings.
  - d Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

SPECIES	LB/ACRE
Shadscale Indian ricegrass	3
Galleta grass	. 2

- e All trash and debris will be carried off-site and disposed of in a BLM approved site.
- f Access to the site will be confined to the existing road. Blading will be kept to a minimum by removing only those rocks and debris blocking the road and by filling in any washed out areas.

- 6 Monroe 22-20 SE¼NW¼ 20, T. 31 S., R. 15 E. U-21477
  - a The drill site will be moved 75 feet to the west in order to drill on a level spot on the old existing road.
  - b The drill site will not be bladed.
  - c A small reserve pit will be constructed to hold cuttings.
  - d Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

SPECIES	LB/ACRES
Shadscale Indian ricegrass	3 3
Galleta grass	2

- e All trash and debris will be carried off-site and disposed of in a BLM approved site.
- f Access to the site will be confined to the existing road. Blading will be kept to a minimum by removing only those rocks and debris blocking the road and by filling in any washed out areas.
- 7 Eastex 41-20 NE NE 20, T. 31 S., R. 15 E. U-21477
  - a The drill site will not be bladed and will be located directly adjacent to main access road in North Hatch Canyon.
  - b A small reserve pit will be constructed to hold cuttings.
  - c Upon completion of the well the pit will be covered, the site will be disked, and the following seed mixture will be hand broadcasted over the site.

SPECIES		LB/ACRE
Shadscale Indian ricegrass Galleta grass		3 3 2

- d All trash and debris will be carried off-site and disposed of in a BLM approved site.
- 8 Cromwell 33-29 SW4SE4 29, T. 31 S., R. 15 E. U-21476
  - a The drill site will not be bladed.
  - b A small reserve pit will be constructed to hold cuttings. --

c - Access to the site will involve blading roughly 3/4 mile of new road from the existing road in South Hatch Canyon. This road will be constructed with a minimum amount of blading and will be reclaimed from the site all the way back to the South Hatch Canyon road. All cuts will be recontoured, the road disked and revegetated by hand broadcasting the following species.

SPECIES	•	•	LB/ACRE
Shadscale Indian ricegrass Galleta grass	· .		3 3 2

- d Upon completion fo the well the pit will be covered, the site will be disked and the above listed species will be hand broadcasted over the site.
- e All trash and debris will be carried off and disposed of in a BLM approved site.

In addition to the above mentioned site specific stipulations the entire project should be covered by two more protective measures.

- 1) No unnecessary off-road driving will be authorized. Four-wheel drives will be restricted to existing roads.
- 2) No uranium claim markers, or cairns, will be destroyed or damaged.

The majority of the project takes place in BLM Wilderness Inventory Unit # 241, Fiddler Butte. The areas wilderness characteristics are not excepttional and as a result the BLM's inventory has recommended that the unit be dropped from any further wilderness study. However, under BLM's Interim Management Policy of Lands Under Wilderness Review (IMP), we are mandated to protect the area from any further undue or unnecessary degradation until October 1, 1980, at which time the area will officially fall out of further wilderness consideration. This time frame allows the public to comment on our decision. If there are any comments or protests to put this area back into wilderness study status, then the Bureau will have to assess the comments and decide if they are worthy of consideration. Therefore, the area could go back into wilderness study status in October and as a result we must protect the area.

The BLM's IMP Guidelines mandate that these wilderness guidelines be addressed in an Environmental Assessment (EA).

Therefore, since the GS is preparing the EA for this project, we would request that this information be included in the document. You can also include the statement that the Bureau has determined that impacts from this project will not impair the wilderness characteristics of the area and that if the mitigating measures are followed, the impacts can be returned to a substantially unnoticeable condition.

The BLM has also conducted surveys for Threatened and Endangered Plants and Animals in the project area and as a result of these surveys T & E clearences

are granted as no T & E plants or animals were found. The BLM can also grant Archaeological clearance at this time based on an archaeological survey conducted of the area by Powers Elevation Company.

If you have any questions concerning the foregoing discussion, or if you need any additional information, please feel free to contact our office.

Sincerely,

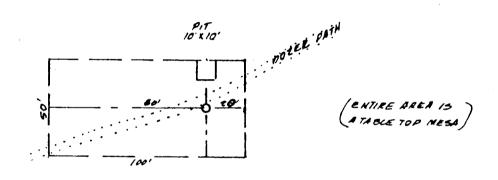
Arez Manager

CC; Chuck Horsburgh Richfield BLM

> W.J. Averett, Consulting Petroleum Engineer 1682 Woodland Dr. Provo, Utah 84601

PIT & PAD LAYOUT # 44-15 GARFIELD WILLIAM L. KIRKWOOD SEC. 15, T. 915., R.15E.

VERTICAL CLIFF RISES TO "THE BIG RIDGE".



ONE INCH SOFEET

POWERS ELEV. CO GRAVD JCT., COLO. BY CARRY D. PECKER G. ZO-BO

Form approved. Budget Bureau No. 42-R1425.

5. LEARE DESIGNATION AND SERIAL NO.

# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

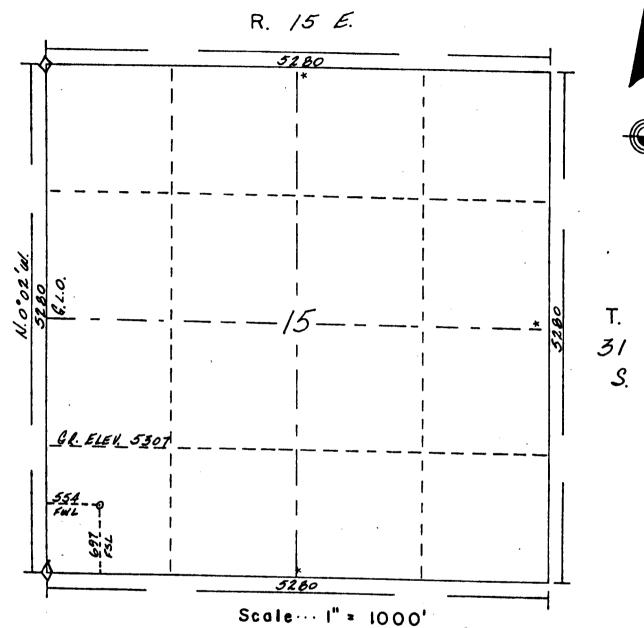
		GICAL SURV					6. IF INDIAN, ALLOTTER	
APPLICATION	Y FOR PERMIT	TO DRILL, I	DEEPE	N, OR PL	UG B	ACK	N/A	OR TRIBE NAME
DRI b. Type of well	LL 🖸	DEEPEN (			S BAC		7. UNIT AGREEMENT NO	Caryon
OIL WELL W	ELL OTHER		81A 201	GER X	BONE		8. FARM OR LEASE NAM	111
William C. Ki 3. ADDRESS OF OPERATOR	rkwood			·····			Garfield 9. WELL NO. #44-15	
P. O. Drawer 4. LOCATION OF WELL (R. At surface	3439 Casper .	Wyoming 82	601 h any 81	ate requirements	B. <sup>6</sup> )		10. FIELD AND POOL, O	R WILDCAT
At proposed prod. son	_	4497' FWL (	SE SE	<u>)</u>			11. SEC., T., R., M., OR B AND SURVEY OR AR	BA
14. DIRTANCE IN MILES	Same AND DIRECTION FROM NE.	AREST TOWN OR POS	T OFFICE	<del></del>			Sec. 15 T31S	RISE
Approximately 15. DISTANCE FROM PROPULOCATION TO NEAREST	•	of Hanksvi	lle, l 16. No.	Utah of ACRES IN LI	LASE		Garfield FACRES ASSIGNED	Utah
PROPERTY OF LEASE L (Also to nearest drig	r. unit line, if any)	599'		2560			40	
18. DISTANCE FROM PROP TO NEAREST WELL, D OR APPLIED FOR, ON THE	RILLING, COMPLETED,	2640' +	19. PRC	POSED DEPTH		_	IT OR CABLE TOOLS	
21. ELEVATIONS (Show who		2040 +	<u> </u>	550'	.V	ι κοτ	ary   22. APPROX. DATE WO	ME WILL START
		5321' GR		U OPI			June 15, 198	
23.		PROPOSED CASI	NG AND	CEMENTING I	PROGRA	M		
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER P		SETTING DEP	TH		QUANTITY OF CEMEN	T
812"	6 5/8" New	24# K-55		20'			cement, Class	
5 5/8"	4 1/2" New	9.5# K-55	8Rd.	550'		50 sxs	cement, Class	. "G" 2% Ca
2. Log B.O.P 3. Run tests 4. Run logs,  EXHIBITS ATTA "A" "B" "D" "E" "F"	Location and The Ten-Poin The Multi-Po Access Road Radius Map o	ily drill reand run 4½" d perforate  Elevation I t Compliance int Requirer Maps to Loca f Field	Plat Progression	s and drilling if prod stimulate gram for A.P.D APPROVE OF OIL, GA	1 5 5 luctivas ne D BY	THE	JUL 0 8 1980	
IN ABOVE SPACE DESCRIBE sone. If proposal is to preventer program, if an 24.	arili or deepen direction	proposal is to deepally, give pertinen	pen or pi	Peter de	Suy	d measured	DATE	l new productive  B. Give blowout  A-80
(This space for Feder PERMIT NO	ral or State office use) 017-30092 AL, IF ANY:	TII	FLE	APPROVAL DATE _		7/9/	ØD DATE	

Section 1991 The Control of the Cont

The state of the s



Protraction Diagram No. BLM Area 2 March 7, 1961



Powers Elevation Company, Inc. of Denver, Colorado has in accordance with a request from Tim Schowalter for WILLIAM C. KIRKWOOD determined the location of #14-15 REMINGTON to be 697 F3L & 554 FWL of Section 15 Township 31 S. Range 15 E. of the Salt Lake Base and Meridian Garfield County, Utak.

I hereby certify that this plat is an accurate representation of a correct survey showing the location of # 14-15 RFMINGTON

Date: <u>5-9-80</u>

Licensed Land Surveyor No. 4189 State of Utah

#### EXHIBIT "B"

## TEN-POINT COMPLIANCE PROGRAM

#### OF NTL-6 APPROVAL OF OPERATIONS

Attached to Form 9-331C William C. Kirkwood Garfield 44-15 SESE, Sec. 15 T31S R15E 599' FSL & 4497' FWL Garfield County, Utah

1. The Geologic Surface Formation

The surface formation is the Chinle.

Estimated Tops of Important Geologic Markers

White Rim Organ Rock 280' 530'

Total Depth

550'

3. Estimated Depths of Anticipated Water, Oil, Gas or Minerals

No water zones are anticipated White Rim

280'

0i1

The Proposed Casing Program

HOLE SIZE 8½"	INTERVAL 0-20	SECTION LENGTH	SIZE (OD) 6 5/8"	WEIGHT, GRADE & JOINT	NEW OR USED
5 5/8"	0-550'	550'	6 5/8" 4 1/2"	24#, K-55, 8Rd. 9.5#, K-55,8Rd.	New New

Cement Program

A. Surface casing - 10 sxs cement, Class "G", 2% CaCl.
B. Production casing - 50 sxs cement, Class "G", 2% CaCl.

- 5. The Operator's Minimum Specifications for Pressure Control
  Not Applicable.
- 6. The Type and Characteristics of the Proposed Circulating Muds
  Not Applicable Air Drilled.
- 7. The Auxiliary Equipment to be Used

Not Applicable

- 8. The Testing, Logging and Coring Programs to be Followed
  - (a) No DST'S are anticipated.
  - (b) An IES Log and a Density Log will be run from surface to 530 feet.
  - (c) Coring is anticipated from the top of the White Rim to top of the Organ Rock, a total of 150 feet.
  - (d) Stimulation procedures will be determined after evaluation of logs. If treatment is indicated, appropriate Sundry Notice will be submitted.
- Any Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well.

No hydrogen sulfide or other hazardous fluids or gases have been found, reported or known to exist at these depths in the area.

10. Anticipated Starting Date and Duration of the Operations

The anticipated starting date is set for June 15, 1980, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 4 days after spudding the well and drilling to casing point.

#### EXHIBIT "D"

#### MULTI-POINT REQUIREMENTS TO ACCOMPANY A.P.D.

Attached to Form 9-331C William C. Kirkwood #44-15 Garfield SESE, Sec. 15 T315-R15E 599' FSL & 4497' FWL Garfield, Utah

#### Existing Roads

- A. The proposed well site and elevation plat is shown as <a href="EXHIBIT "A"</a>. Staking included two 200' directional reference stakes, also shown on <a href="EXHIBIT "A"</a>.
- B. From Hanksville Post Office go easterly 18.2 miles on Highway 95; turn left on BLM dirt road to Poison Spring Canyon; go 16.4 miles to Dirty Devil River. Ford river and take road around Buckacre Point and into North Hatch Canyon. Continue up North Hatch Canyon to intersection with road from North; follow this road past #14-15 Remington location to flagged access road, as shown on EXHIBIT "E".
- C. All roads to location are color-coded on EXHIBIT "E". A new access road from the existing road will be used as shown on EXHIBIT "E".
- D. This is an exploratory well. All existing roads within a three-mile radius are shown on EXHIBIT "E".
- E. N/A
- F. The existing roads need no improvement except to clear off rocks and repair winter damage.

## 2. Planned Access Roads

Map showing all necessary access roads to be constructed or reconstructed is shown as <a href="EXHIBIT">EXHIBIT "E"</a> for the following:

# A. Drilling Operations

1. If rocks are removed, the 0.1 mile of new access road can be used without blading. No surfacing is planned. The truck-mounted rig used for drilling weighs approximately 8 tons.

- 2. The grade will be 2%.
- 3. No turnouts are planned.
- 4. No drainage design is planned.
- 5. No culverts are needed.
- 6. No gates or fence cuts and cattleguards will be required.
- 7. The new access road to be used was center line flagged. This road does cross B.L.M. lands, as shown on EXHIBIT "E".

#### B. Production

1. The grade on the existing roads ranges from 0-15%; most areas are 3-4%. No road construction or upgrading is planned if well is productive.

## 3. Location of Existing Wells

For all existing wells within two mile radius of Exploratory well, see  $\overline{\text{EXHIBIT "F"}}$ .

- (1) There are 0 water wells within a two mile radius of this location.
- (2) There are 0 abandoned wells in this two mile radius.
- (3) There are 0 temporarily abandoned wells.
- (4) There are O disposal wells.
- (5) There are 0 wells presently being drilled.
- (6) There are 0 producing wells within this two mile radius.
- (7) There are 0 shut-in wells.
- (8) There are O injection wells.
- (9) There are 0 monitoring or observation wells for other uses.
- (10) There are several core holes for prospecting located throughout the canyon lands.

## Location of Existing and/or Proposed Facilities

A. Within one-mile radius of location, the following existing facilities are owned or controlled by lessee/operator:

(1) Tank-Batteries: None

- (2) Production Facilities: None
- (3) Oil Gathering Lines: None
- (4) Gás Gathering Lines: None
- (5) Injection Lines: None
- (6) Disposal Lines: None
- B. If production is obtained, there will be no production facilities installed at this time.

## Location and Type of Water Source

No water will be required. This well is to be air-drilled.

#### Construction Materials

No construction materials are needed for any phase of the proposed operations.

## 7. Handling of Waste Materials and Disposal

- (1) There will be no drill cuttings. This well is to be air-drilled and exhaust will be dispersed into the atmosphere.
- (2) There will be no drill fluids and no pits will be dug. If any water is encountered during drilling, a surface tank will be set.
- (3) Garbage and trash will be collected in containers and hauled away to approved sanitary landfill. Human waste will be collected in chemical facility and hauled away.
- (4) All materials used during drilling will be removed from the drillsite within 30 days after completion of drilling.

## 8. Ancillary Facilities

No air strip, camp or other facilities will be built during drilling of this well.

## 9. Well Site Layout

z .

- (1) No drill pad will be constructed for drilling this well.
- (2) A truck-mounted rig will be used. The truck is approximately 30' long and weighs approximately 8 tons.

(3) No pits will be dug. There will be no living facilities or trailers on site.

#### 10. Plans for Restoration

- (1) Such disturbance as will be created by this drilling operation can be easily repaired should this area be finalized as a Wilderness and Recreation Area.
- (2) After drilling operations cease, revegetation and restoration will be performed in accordance with B.L.M. recommendations. This will be undertaken within whatever time frame the B.L.M. deems advisable.

#### 11. Other Information

- (1) The location sits on a bench that is almost flat; it slopes slightly to the South. The Big Ridge rises vertically to the North. The soil is sandy and clay loam. Vegetation is cedar and pinon trees, shadscale, cactus and mormon tea. There are livestock, deer, rabbits, coyotes, rodents, chubars and lizards in the area.
- (2) The primary surface use is for grazing and recreation. The surface is owned by the U.S. Government.
- (3) The closest live water is in South Hatch Canyon, south of location as shown on <a href="EXHIBIT">EXHIBIT "E"</a>.

The closest dwelling is Hite Marina, approximately 20 miles south of location.

There are no known archaeological, historical, or cultural heritages that will be disturbed by this drilling.

- (4) There are no reported restrictions or reservations noted on the oil and gas lease.
- (5) Drilling is planned for on or about June 15, 1980. It is anticipated that the casing point will be reached within 4 days after commencement of drilling.

#### 12. Lessee's or Operator's Representative

George Lapaseotes
Agent Consultant for
William C. Kirkwood
600 South Cherry Street
Suite 1201
Denver, Colorado 80222
Phone (303) 321-2217

William C. Vandeventer William C. Kirkwood Drawer 3439 Casper, Wyoming 82601 (307) 265-5178

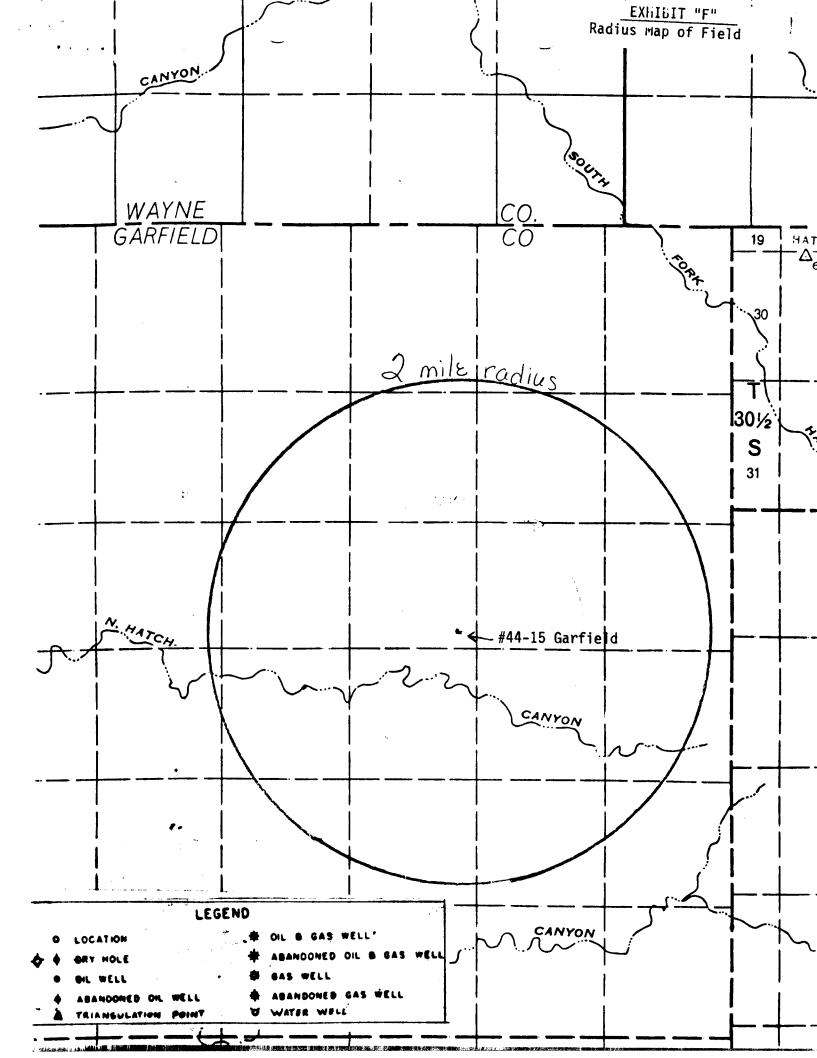
#### 13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by William C. Kirkwood and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

5-29-80

Date

George Lapaseotes Agent Consultant for William C. Kirkwood



FROM: : DISTRICT GEOLOGIST, E, SALT LAKE CITY, UTAH
TO: DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH  SUBJECT: APD MINERAL EVALUATION REPORT  LEASE NO. U - 2 (037)
λ
OPERATOR: William C. Kirkwood WELL NO. 44-15
LOCATION: ½ SE½ SE½ sec. 15, T. 315, R. 15 E., SLM  Carfield County, Utah
1. Stratigraphy: Operator tops appear reasonable
Chinle surface
White Rim 280'
Organ Rock
<u>10</u> <u>5-50</u>
2. Fresh Water:
More probable
3. Leasable Minerals:
•
4. Additional Logs Needed: Alequate
4. Additional bogs needed.
5. Potential Geologic Hazards: None anticipated
J. Tottential Geologic Mazaras.
6. References and Remarks:
Heavy oil - might require Tertiary extraction methods
Signature: Sremu W. Wood Date: 6-24-80

# Memorandum

To:	District Oil and Gas Engineer, Mr. Edward Guynn					
From:	Mining, Supervisor, Mr. Jackson W. Moffitt					
Subject:	Application for Permit to Drill (form 9-331c) Federal oil and gas lease No. 1-21037 Well No. 44-15					
1.	The location appears potentially valuable for:					
	/_/ strip mining*					
	underground mining**					
	has no known potential.					
2.	The proposed area is					
	under a Federal lease for under the jurisdiction of this office.					
	not under a Federal lease under the jurisdiction of this office.					
	Please request the operator to furnish resistivity, density, Gamma-Ray, or other appropriate electric logs covering all formations containing potentially valuable minerals subject to the Mineral Leasing Act of 1920.					
*If	location has strip mining potential:					
	Surface casing should be set to at least 50 feet below the lowest strip minable zone at and cemented to surface. Upon abandonment, a 300-foot cement plug should be set immediately below the base of the minable zone.					
∻∻If	location has underground mining potential:					
	The minable zones should be isolated with cement from a point 100 feet below the formation to 100 feet above the formation. Water-bearing horizons should be cemented in like manner. Except for salines or water-bearing horizons with potential for mixing aquifers, a depth of 4,000 feet has been deemed the lowest limit for cementing.					

## \*\* FILE NOTATIONS \*\*

DATE	: July 8, 1980
OPER	ATOR: William C. Kirkwood
WELL	NO: Hatch Caryon Unit # 44-15 (Harfield)
	tion: Sec. 15 T. 315 R. 15E. County: Narfild
File	Prepared: V Entered on N.I.D: V
Card	Indexed: Completion Sheet:
	API Number 43-017-30092
CHEC	KED BY:
	Petroleum Engineer: Mit Musles 7-9-80
	Director:
	Administrative Aide: & m unit boundy spacing
APPR	ROVAL LETTER:
	Bond Required: /   Survey Plat Required: /
. 1.	Order No O.K. Rule C-3
spermal	Rule C-3(c), Topographic Exception - company owns or controls acreage within a 660' radius of proposed site
1	Lease Designation Ded Whit Plotted on Map
	Approval Letter Written  Hot Line  P.I.  V
	·

#### July 9, 1980

William C. Kirkwood P.O. Drawer 3439 Casper. Wyoming 82601

RE: HCU #33-29 (Cromwell), Sec. 29, T. 318, R. 15E., Garfield County, Utah HCU #44-4 (White Rim), Sec. 4, T. 318, R. 15E., Garfield County, Utah HCU #44-18 (Garfield), Sec. 15, T. 318, R. 18E., Garfield County, Utah HCU #41-20 (Eastex), Sec. 20, T. 318, R. 15E., Garfield County, Utah

Insofar as this office is concerned, approval to drill the above referred to oil wells is hereby granted in accordance with Section 40-6-11, Utah Code Annotated 1953; and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon these wells, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer

Office: 533-5771 Home: 876-3001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (acquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API numbers assigned to these wells are #33-29: 43-017-30090; #44-4: 43-017-30091; #44-15: 43-017-30092; #41-20: 43-017-30093.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder Petroleum Engineer

/btm

ce: USGS

United States Department of the Interior Geological Survey 2000 Administration Bldg. 1745 West 1700 South Salt Lake City, Utah 84104

Usual Environmental Analysis

Date. July 11 1980

Operator. William C. Kirkwood

Project or Well Name and No.: 44-15

Location. 599' FSL & 4497' FWL

Sec. 15 T.: 31S R. 15E

County Garfield

State. Utah

Field/Unit. Wildcat

Lease No.: U-21037

Permit No. N/A

Joint Field Inspection Date. June 26, 1980

Prepared By George Diwachak

Field Inspection Participants Titles and Organizations:

George Diwachak

Environmental Scientist

U.S.G.S.

Larry Gearhart

Surface Protection

BLM

Lynn Jackson

Geologist

BLM

Helenin Co

Wallace J. Averett

Engineer

William C. Kirkwood

Larry Becker

Surveyor

Powers Elevation

Related Environmental Analyses and References:

(1) Final Environmental Statement - Proposed General Management Plan, Wilderness Recommendation Road Study Alternatives Glenn Canyon National Recreation Area National Park Service Page Arizona July 1979.

#### DISCRIPTION OF PROPOSED ACTION

#### Proposed Action.

1. Location State: Utah.

County: Garfield

599' FSL 4497' FWL, SE 1/4 SE 1/4

Section 15, T 31S, R 15E, S L M.

2. Surface Ownership Location. Public.

Access Road: Public.

Status of Reclamation Agreements. Not Applicable.

3. Dates APD Filed: June 4, 1980.

APD Technically Complete: June 23, 1980 .

APD Administratively Complete:

4. Project Time Frame

Starting Date: Upon approval.

Duration of Drilling activities: 2-3 days.

A period of 30 to 60 days is normally necessary to complete a well for production if hydrocarbons are discovered. If a dry hole is drilled, recontouring and reseeding would normally occur within one year, revegetation or restoration may take several years. If the well is a producer, an indefinite period of time would occur between completion and rehabilitation.

5. Related actions of other federal or state agencies and Indian tribes:

The location falls within a BLM Wilderness Study Area with no exceptional wilderness characteristics and as a result of a BLM inventory, the unit has been recommended to be dropped from further study (See attached BLM Memo).

6. Nearby pending actions which may affect or be affected by the proposed action:

None known.

7. Status of Variance Requests:

None known.

The following elements of the proposed action would/could result in environmental impacts

1. The drill site would not be bladed. A truck mounted, air drilling rig would be employed utilizing an area 50 feet wide by 100 feet long. A small 10' X 10' reserve pit would be constructed to hold cuttings. A pit toilet would also be constructed for human sewage.

Surface disturbances would be kept to a minimum.

This well is part of an 8 well program within T 31S, R 15E.

- 2. Drilling techniques would employ a small truck mounted, air rig.
- 3. Waste disposal All trash would be confined to containers and disposed of in a BLM approved location.
- 4. Traffic would be minimal and should be confined to existing roadways.
- 5. Water requirements None needed.
- Completion None Anticipated.
- 7. Production No production facilities are anticipated at this time.
- 8. Transportation of hydrocarbons Not requested in APD.

Details of the proposed action are described in the Application for Permit to Drill.

#### Environmental Considerations of the Proposed Action.

Regional Setting/Topography: Regional topography consists of Canyonlands terrain steep, rock walled canyons and mesas with relatively flat valleys, within the Dirty Devil River Basin. The location is situated on a flat ledge with the wall of Hatch Canyon rising to the north and talus slopes dropping to the south. Access to the ledge is no problem and adequate space is available for drilling.

#### PARAMETER

#### A. Geology

Other Local Mineral Resources to be Protected. None.

Information Source APD, Mineral Evaluation Report, Mining Report.

#### 2. Hazards:

a. Land Stability. No instability expected, wellsite terrain is basically flat. A truck mounted rig with hydraulically controlled leveling devices would be used.

Information Source: APD, Field Observation, Operator.

b. Subsidence None expected.

Information Source: APD, Field Observation.

c. Seismicity: The wellsite is in an area of minor seismic risk.

Information Source: Rocky Mountain Association of Geologists.

d. <u>High Pressure Zones/Blowout Prevention</u>: No high pressure anticipated or found during drilling of nearby State Wells in Section 32, T 31S R 15E and Section 36, T 31S, R 14E. No BOP equipment planned for this shallow test.

Information Source. APD, Operator.

#### B. Soils

1. Soil Character. Soils in the area are a sandy clay with occasional sandy areas. Soil disturbances would be minimal and confined to pit and road construction.

Information Source. Field Observation, APD, BLM.

2. Erosion/Sedimentation: Minimal as surface disturbances would be limited.

Information Source: BLM, APD, Field Observation.

C. Air Quality: The wellsite is within a Class II Attainment Area. Air quality would decrease temporarily from rig and vehicle emissions and fugitive dust.

Information Source: BLM, Field Observation.

D. <u>Noise Levels</u>. Noise levels would increase temporarily from rig and vehicle operations affecting wildlife in a distributional sense.

Information Source: Field Observation.

#### E. Water Resources

#### 1. Hydrologic Character

a. <u>Surface Waters</u>. No perennial drainages in area. Wellsite is in Dirty Devil River Basin which flows to Lake Powell. Some siltation to Lake Powell could occur but would be minimal. No water is needed for drilling.

Information Source: Field Observation, APD.

b. Ground Waters. No fresh water expected to be be encountered during drilling. Commingling of any aquifers in area is possible. Water wells drilled to the White Rim formation, 30 miles to the north-northeast have yielded sufficient quantities of useable, though highly mineralized water. However, the two wells drilled on nearby State locations did not discover any water in significant amounts.

Information Source: Mineral Evaluation Report. .

#### 2. Water Quality

a. <u>Surface Waters</u>: Spill potential to live surface waters is minimal.

Information Source: Field Observation.

b. <u>Ground Waters:</u> Insignificant impacts expected since air drilling techniques would be employed. Upon completion the etire hole would be cemented preventing contamination potential.

Information Source: Field Observation, APD.

#### F. Flora and Fauna

1. Endangered and Threatened Species Determination

Based on the formal comments received from the BLM on July 1, 1980, we determine that there would be no effect on endangered and threatened species and their critical habitat.

2.  $\underline{\text{Flora:}}$  Vegetation in area is sparse due to limited water. Plants are of a blackbrush community.

Information Source: Field Observation, BLM.

3.  $\underline{\text{Fauna:}}$  Wildlife in area is sparse due to limited food source and consists predominately of rodents, coyotes, reptiles, chukars, songbirds and few raptors.

Information Source: APD, Field Observation, BLM.

#### G. Land Uses

1. General: The general area is used for grazing, minimal mineral exploration/extraction and recreation.

Information Source: BLM, Field Observation.

2. Affected Floodplains and/or Wetlands: N/A.

Information Source: Field Observation.

3. Roadless/Wilderness Area: The wellsite falls within BLM Wilderness Inventory Unit #241, Fiddler Butte. The area's wilderness characteristics are not exceptional and as a result, a BLM inventory has recommended that the unit be dropped from any further wilderness study, however, under BLM's Interim Management Policy of Lands under Wilderness Review (IMP), it is mandated that the area be protected from any further undue or unnecessary degradation until October 1, 1980, at which time the area will officially fall out of further wilderness consideration. This allows for public comment on BLM's decision. Any comments or protests to return this area back into wilderness study status would require the BLM to assess the comments and decide if they are worthy of consideration. Therefore, the area could return into Wilderness Study Status in October.

The BLM has determined that impacts from this project would not impair the wilderness characteristics of the area. This fact is supported by the operating plan presented in the APD. Furthermore, if recommended mitigative measures are followed, any impacts could be returned to a substantially unnoticed condition.

H. Aesthetics: The operation does not blend in with the natural surroundings. However, considering the short duration of drilling the proposed 8 well program and the minimal surface disturbances proposed, this action would pose little impact to area aesthetics.

Information Source: Field Observation, APD.

I. <u>Socioeconomics</u>: The remoteness of the area limits socioeconomic impacts in <u>Garfield County</u>, Utah. Most services and personnel would emanate from Moab, Utah, utilizing company camp facilities on State Lands. Some economic increases could be expected in Hanksville, Utah, the nearest town.

Information Source: Field Observation.

J. <u>Cultural Resources Determination</u>: Based on the formal comments received from BLM on July 1, 1980, we determine that there would be no effect on cultural resources.

Information Source: BLM.

K. Other: Glen Canyon National Recreation Area is located about 5 miles southeast of the project area. No impacts to the recreation area are expected.

Information Source: Field Observation.

L. Adequacy of Restoration Plans: The restoration plan meets the minimum requirements of NTL-6. Restoration recommendations have been supplied by the BLM.

Information Source: BLM, Field Observation, APD.

#### Alternatives to the Proposed Action:

- 1. Disapproving the proposed action or no action If the proposed action is denied, no action would occur, the existing environment would remain in its present state, the lessee/operator would not realize any return on investments and the public would be denied a potential energy source.
- 2. Approving the project with the recommended stipulations Under federal oil and gas leasing provisions, the Geological Survey has a responsibility to approve mineral development if the environmental consequences are not too severe or irreversible. Permanent damage to the surface and subsurface would be prevented as much as possible under USGS and Surface Management Agency supervision. Environmental impacts would be significantly mitigated.

#### Adverse Environmental Effects:

#### 1. If approved as proposed:

- a. A minimal amount of vegetation would be removed, slightly increasing and accelerating erosion potential.
- b. Minor air pollution would be induced on a temporary basis due to exhaust emissions from rig engines and support traffic.
- c. The potential for fires, leaks, spills of gas and oil or water exists but is minimal.
- d. During construction and drilling phases of the operation, noise and dust levels would increase.
- e. Distractions from aesthetics during the lifetime of the project would exist.
- f. Erosion from the site would eventually be carried as sediment in Lake Powell.
- g. If hydrocarbons would be discovered and produced, further development of the area could be expected to occur, which would result in the extraction of irreplaceable resource, and further negative environmental impacts. These impacts include the cumulative loss of wildlife habitat due to the areas necessary for roads, pipelines, drillsites, and transmission lines. These actions may disrupt wildlife social behavior and force habitat relocation over an extended period of time. In addition, the cumulative effects of non-point erosion become substantial in a developing field, primarily those located near perennial streams where siltation and sedimentation are critical to aquatic life cycles.

#### 2. Conditional Approval:

- All adverse impacts described in section one above could occur, except:
- a. Constructing a reserve pit would provide for adequate disposal of cuttings and any encountered ground water.
- b. Keeping dirt work to a minimum would preserve the remote, pristine characteristics of the area.

## Recommended Approval Conditions:

Drilling should be allowed, provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator:

- 1. See attached BLM Stipulations.
- 2. The drillsite will not be bladed, however, a small 10' by 10' reserve pit an a pit toilet would be constructed.
- 3. All trash and debris will be removed from the site.

### <u>Controversial Issues and Conservation Division Response:</u>

None.

We have considered the proposed action in the preceding pages of this EA and find, based on the analysis of environmental considerations provided therein, no evidence to indicate that it will significantly (40 CFR 1508.27) impact the quality of the human environment.

#### Determination:

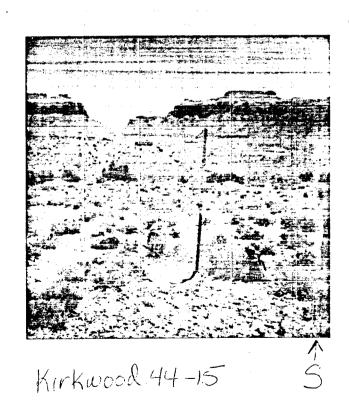
I determine that the proposed action (as modified by the recommended approval conditions) does not constitute a major Federal action significantly affecting the quality of the human environment in the sense of NEPA, Section 102 (2)(C).

**DISTRICT ENGINEER** 

\*JUL 1 6 1980

Signature & Title of Approving Official

Date



-7-

#### SELECTED REFERENCES

- Anderson, B.A. 1979, <u>Desert Plants of Utah</u>: Cooperative Extension Service, Utah State University, Logan, Utah. 146 p.
- Bureau of Land Management, 1979, Final Initial Wilderness Inventory, Utah: U.S. Department of the Interior, BLM, Salt Lake City, Utah, 50 p.
- Bureau of Land Management, 1979, <u>Interim Management Policy and Guidelines</u>
  for Lands Under Wilderness Review: U.S. Department of the Interior,
  BLM, Washington, D.C. 32 p.
- Keller, E.A., 1976, <u>Environmental Geology:</u> C.E. Merril Publishing Company, Columbus, Ohio. 488 p.
- National Park Service, 1979, <u>Draft Mineral Management Plan:</u> USDI/NPS, Page, A2. 56 p.
- National Park Service, 1979, <u>Proposed General Management Plan, Wilderness Recommendations</u>, Road Study Alternatives, Final Environmental Statement, Glen Canyon National Recreation Area / Arizona-Utah: USDI/NPS, Page A2. 347p.
- Rocky Mountain Association of Geologists, 1972, Geologic Atlas of the Rocky Mountain Region: Denver, Colorado. 331 p.
- Sumsion, C.T. and E.L. Bolke, 1972, <u>Water Resources of Part of Canyonlands National Park, Southeastern Utah</u>: U.S. Department of the Interior, Geological Survey, Salt Lake City Utah, Open File Report. 75 p.
- Wilson, LeMoyne, et.al, 1975, <u>Soils of Utah:</u> Agricultural experiment Station, Bulletion 492, Utah State University, Logan, Utah. 94 p.
- Zarn, Mark, 1977, Ecological Characteristics of Pinyon-Juniper Woodlands on the Colorado Plateau: U.S. Dept. of Interior, Bureau of Land Management, Technical Note 310, Denver, Colorado 183 p.

Form approved. Budget Bureau No. 42-R1425.

5. LEASE DESIGNATION AND SERIAL NO.

# UNITED STATES DEPARTMENT OF THE INTERIOR

	GE	DLOGICAL SURV	EY				
APPLICATION	Y FOR PERM	IT TO DRILL,	DEEPE	N, OR PL	UG B	ACK_	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
b. TYPE OF WELL	AS OTHE	DEEPEN	_	GLE [	MULTIPL	_	N/A 7. UNIT AGREEMENT NAME N/A Hatch Canyon 8. FARM OF LEASE NAME Garfield
William C. Ki 3. ADDRESS OF OPERATOR	rkwood						9. WELL NO. #44-15
P. O. Drawer 4. LOCATION OF WELL (R At surface		r Wyoming 82 y and in accordance wh & 4497' FWL (			its.•)		10. FIELD AND POOL, OR WILDCAT  Wildcat  11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
At proposed prod. zon		α 4497 FWL (	SE SE	,			
14. DISTANCE IN MILES							Sec. 15 T31S R15E  12. COUNTY OR PARISH 13. STATE
15. DISTANCE FROM PROPO LOCATION TO NEAREST PROPERTY OR LEASE I	OSED* T Line, ft.	st of Hanksvi 599'	l]e,     <sup>16.</sup> №.	Jtah OF ACRES IN 2560	LEASE		Garfield   Utah of acres assigned his well 40
(Also to nearest drig 18. DISTANCE FROM PROP TO NEAREST WELL, D OR APPLIED FOR, ON TH	POSED LOCATION* RILLING, COMPLETED, IS LEASE, FT.	2640' +	19. PRO	prosed depth 550'			tary
21. ELEVATIONS (Show who	ether DF, RT, GR, e	5321' GR					June 15, 1980
23.		PROPOSED CASI	NG AND	CEMENTING	PROGRA	M	1 ounce 103 1300
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER	TOOT	SETTING D	ЕРТН		QUANTITY OF CEMENT
81211	6 5/8" Ne			20'		10 sxs	s cement, Class "G" 2% CaC
5 5/8"	4 1/2" Ne	9.5# K-55	oku.	550'		50 SX:	s cement, Class "G" 2% CaC
2. Log B.O.P	C. checks in if warrante as needed,  CHED:  Location a  The Ten-Po  The Multi-	et 6 5/8" surfidaily drill red and run $4\frac{1}{2}$ " and perforate and Elevation oint Compliance Point Required Maps to Local of Field	eport casi and Plat e Proments	s and dri ng if pro stimulate D gram	11 5 5 oductive as no	5/8" ho	
IN ABOVE SPACE DESCRIBI zone. If proposal is to preventer program, if an 24.	drill or deepen dire	: If proposal is to dectionally, give pertine	epen or p nt data o	iug back, give n subsurface lo	data on procations an	esent proc d measure	ductive zone and proposed new productive ed and true vertical depths. Give blowout
SIGNED W. W	Clanter		ITLE	f.etv.	блид	v	DATE 2-14-80
(This space for Fede	eral or State office u	Re)					
APPROVED BY	Mone	tue ,	FOR	E. W. GU DISTRIC		ER	AUG 0 4 1980

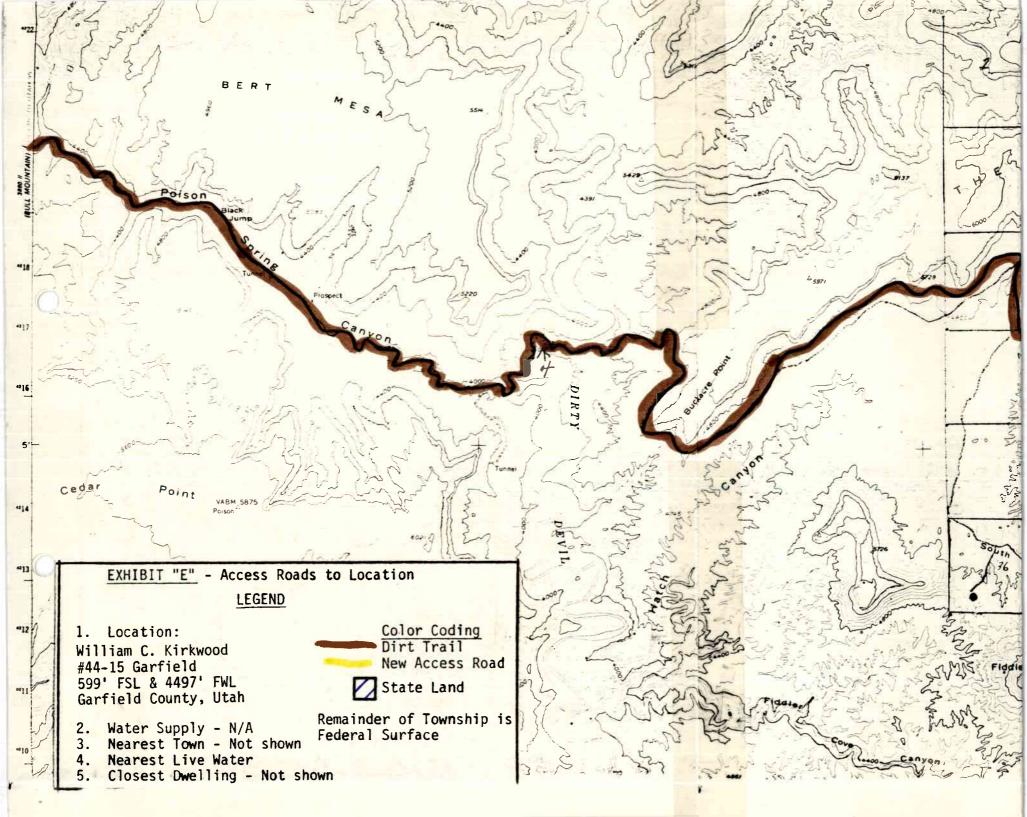
CONDITIONS OF APPROVAL ATTACHED
TO OPERATOR'S COPY

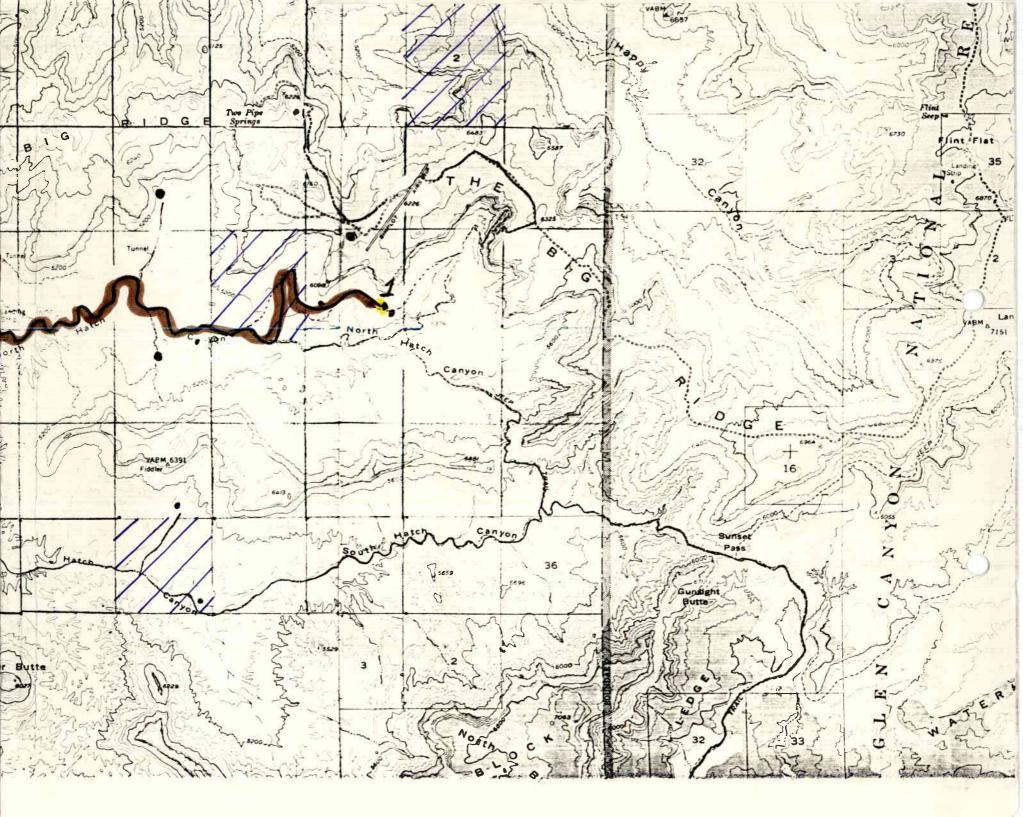
NOTICE OF APPROVAL

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80





William C. Kirkwood 44-15 Garfield Sec 15, T31S, R15E Spud 4:00 pm 8/4/80

DEPTH	FORMATION	L1THOLOGY	THICKNESS DRILLED
0- 110' 110- 450' 450- 507' 507- ?	Chinle Moenkopi White Rim Upper White Rim	White Sandstone	110 <sup>1</sup> 340 <sup>1</sup> 57' 493'
? -1000'	Cedar Mesa	Tan to White Sandstone with red Siltstone (15') at 805-820'	493'

T.D. at 1000' 8/7/80 2 A.M.

Bail at 1000', no water in hole.

### INTERVALS WITH SATURATION:

57'	450-507 <b>'</b>	White Rim Upper, Saturation in Sandstone interbedded with Dolomite approximately, 25' Moderate to heavy saturation in Sandstone with thin [1"] Dolomite Layers
62'	507-5691	White Rim, Moderate Saturation throughout.
11'	569-5801	Heavy Saturation throughout, some bleeding
10'	580-590'	Moderate Sauturation throughout
51	590-595'	Heavy saturation throughout, very friable
5'	615-620'	Light saturation throughout
11'	620-631'	Heavy saturation throughout

Approximately, 125' Moderate to heavy saturation with 38' light to moderate

SCOTT M. MATHESON
Governor

GORDON E. HARMSTON

Executive Director,

NATURAL RESOURCES

CLEON B. FEIGHT

Director



OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON

Chairman

JOHN L. BELL
C. RAY JUVELIN
THADIS W. BOX
MAXILIAN A. FARBMAN
EDWARD T. BECK
E. STEELE McINTYRE

### STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING 1588 West North Temple Salt Lake City, Utah 84116 (801) 533-5771

May 21,1981

William C. Kirkwood P.O. Box Drawer 3439 Casper, Wyoming 82601

Re: SEE ATTACHED SHEET ON WELL DUE

### Gentlemen:

In reference to above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not recieved any notification of spudding. If you do not intend to drill these wells, please notify this Division. If spudding or any other activity has taken place, please send necessary forms. (If we do not hear from your company within fifteen (15) days, we will assume you do not intend to drill these wells and action will be taken to terminate the application.) If you plan on drilling these location at a later date, please notify as such.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

SANDY BATES CLERK-TYPIST

### ATTACHED SHETT ON WELLS DUE

1. Well No. White Rim #44-4 Sec. 4, T. 31S. R. 15E. Garfield County, Utah 10. Well No. State #31-16 Sec. 16, T.32S. R.15E. Garfield County, Utah

2. Well No. Magnum #23-8 Sec. 8. T.31S. R.15E. Garfield County, Utah 11. Well No. State #34-16 Sec. 16, T.31S. R.15E. Garfield County, Utah

- 3. Well No. Remington #14-15 Sec. 15, T.31S. R.15E. Garfield County, Utah
- 4. Well No. Winfield #21-15 Sec. 15, T.31S. R.15E. Garfield County, Utah
- 5. Well No. Garfield #44-15 Sec. 15,T.31S. R.15E. Garfield County, Utah
- 6. Well No.Hatch Canyon Unit #34-16A Sec. 16, T.31S. R.15E. Garfield County, Utah
- 7. Well No. Monroe #22-20 Sec. 20, T.31S. R.15E. Garfield County, Utah
- 8. Well No.Eastex #41-20 Sec. 20, T.31S. R.15E. Garfield County, Utah
- 9. Well No.State #11-2 Sec. 2, T.32S. R.15E. Garfield County, Utah

### WILLIAM C. KIRKWOOD

Suite 300 Market Square Building — 307/265-5178

P. O. Drawer 3439 — Casper, Wyoming 826

& Gas Exploration & Production

January 29,1982

State of Utah Division of Oil, Gas and Mining 1588 West North Temple Salt Lake City, UT 84116

RE: Filing Additions to USGS Form 9-330 or OGCC-3

William C. Kirkwood #44-15 Garfield 4497' FWL 599' FSL Sec. 15, T31S, R15E Garfield County, Utah

### Gentlemen:

Enclosed is a copy of the logs (where run), sample and core descriptions, geologic summaries and other data obtained during drilling and completion operations to date.

Our delay in the further completion of this well, is due to testing presently being done to determine the best method of completion to be used to produce oil from this reservoir. Testing is being done by the University of Utah Fuels Engineering Department on core samples and oil from this reservoir. Additional wells have been cored to obtain samples for analysis of reservoir characteristics and to further delineate oil reserves in the Hatch Canyon Unit. In addition several wells of a pilot test pattern have been drilled.

If you require further information or have any questions please contact me.

Sincerely,

Robert Montgomery

RM:bal

Enclosures

William C. Kirkwood #44-15 Garfield 4497' FWL 599' FSL Sec 15 Twp 315 R 15E Garfield Co., Utah G.L. 5321'

Spudded 8/4/80 T.D. 8/6/80

1000'

				,			·				RCM'79
FM TOPS	DEPTHS	POROSITY	GRADES	ROUNDING	SORTING	\$ of FMWRK	GRAIN	બ		HOLE #44-15 GARMELD SPOT SEC 15 T315 R156	
		182	5 	NO.	SOF	Be	E.S.	SIS	_	LITHOLOGY DISCRIPTION DIAGENESIS	SATURATION- OIL
CHINLE MOENKOPI	01 - 1151 1151 - 1801 1801 - 200 2001 - 2201 2201 - 2501 2501 - 2601 2601 - 2601			הקאינהי	MARIPRE	2888				SO, SITST GRELL TO TAN CALC CMT SETST, REP & WHITE W/ POW, SMUPRS "" SITST, RED & WHITE W/ POW, SMUPRS "" SITST, REP & WHITE W/ POW, W/ LYRS "" SETST, WHITE W/ POW, W/ LYRS "" SUIST, REP & WHITE W/ POW, W/ LYRS "" SUIST, RED & WHITE W/ POWO, GN LYRS "" ""	NONE
	7701 - 250' 750' - 260' 260' - 450'			- T - T - T - T - T - T - T - T - T - T	PP	8 2				SUTST, REP & WHITE W/ DOW, W/LYRS "" " SUTST, WHITE W/ DOLD, GN LYRS "" "	л п
		-  - -									

Pu

SSCY 488 4 170 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NOTES DEPTHS & B & B & C & B & B & LITHOLOGY DISCRIPTION DIAGENESIS SATURATION-OIL  TACT CAREAT (4.00 - 4.08 - 4.00 - 4.0	NOTES DEPTHS & & & & & & & & & & & & & & & & & & &		<u> </u>	ļ			<del> </del>	1	<del> </del>					RCM'79
640-6471111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6201-631' R M 9 S SS, WT SED 00-200 MOD-WYG CLUT NO SAT.  625-680 Lost  626-780' R M 9 SS, WT SED 00-200 MOD-WYG CLUT NO SAT.  CEDYR MEST! 780'-810' R M 8 SS, TAN TO WHITE "" "" ""  820'-1000' R M R M R SS, TAN TO WHITE "" "" ""  820'-1000' R M R M R SS, TAN TO WHITE "" "" ""  820'-1000' R M R M R SS, TAN TO WHITE "" "" ""  820'-1000' R M R M R SS, TAN TO WHITE "" "" "" "" "" "" "" "" "" "" "" "" ""	646-647-631		DEPTHS	POROSITY	GRADES	ROUNDING	SORTING	of	GRAIN	SIZE		SPOT SEC/S T3/S R		SATURATION- OIL
640-6471111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6201-631' R M 9 S S WT RED 00-200 MOD- NYG CLUT NO SAT THOUT SS WT RED 00-200 MOD- NYG CLUT NO SAT.  625-680 Lost	646-647-631	STACT COREAT USO! WHITE RIM UPPER	460 - 468 410.8' - 476' 470 - 475'			R.R.R.R.	SBB	375			1 1	BILD 8.64 1 LIRS (50-50)	1 1 L 1 A h	MOD - SELVES
640-6471111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6201-631' R M 9 S S WT RED 00-200 MOD- NYG CLUT NO SAT THOUT SS WT RED 00-200 MOD- NYG CLUT NO SAT.  625-680 Lost	646-647-631 R M 9 S S WT. REPORT NO SAT THOUT SS WT. RED OF TOO MODE IN CLUST NO SAT.  625-620 Last R M 9 S S WT. REPORT NO SAT.  1. II	WHITE RIM	483'-6"-486 486'-475) 495'-496 496'-507' 507'-511' 511'-369 569'-580'			LINCERRER	যুষ্ঠাযুষ্ঠা	3747095		割る		POLO W SC CYPS (21") 1 SS W THIN POLO LEIRS (21") 1 SS, WT, BED 0-100 M "" " " " " " " " " " " " " " " " " " "	1 k h 1 h 1 h 1 l 1 l 1 l 1 l 1 l 1 l 1 l 1 l 1 l 1 l	MOD SLT-SS MOD TO HAY SAT - S MOD SAT THEOLER "" "" "" "" "" "" "" "" "" "" "" "" ""
675-68D LOST	625-68D LOST  680'-780' & R M & R SS, WT.  CEDAY MESS! 780'-810' & R M & R SS, TAN TO WHITE "" "" "" ""  810'-870' & R M & R M & SS, TAN TO WHITE "" "" "" ""  820'-1000' & R M & R M & SS, TAN TO WHITE "" " " " " " " " " " " " " " " " " "	625-68D.65T	45> (NS)	580' - 595' 595' - 595' 595' - 603' 603' - 605' 605' - 605'' 615' - 620'			REPRESE	इडिडिइइडिडि	79772789				SS, WT, VERY FRILE VITTLE ON SS, WT REN 0-70 WELL SS, WT, HYY CALC CUTT 1-425  SS, WT, BEID 0-30 CMT IN LANGE	CALL CATE	MO SAT VERY WOLL SAT HYYLIN LLYBRS (< MY SAT LIGHT SAT THROUG
820'-1070' R M R S S TAN TO WHITE IN II A 1)			675-68D LOST	631'-675'	A A ME						$\left  - \right $	-		CIUT IOD CAIT	NO SAT
				8201-1027			R 	<u>M</u>	2				SS, TAN TO WHITE	<i>V</i>	* /}

169'-6" 451'

503) 507' 507' 5086' E FOT

612'

637' 650'

#### SUBMIT \_\_\_\_\_ (RIPLICATE\* (Other instructions on reverse side)

## STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

	DIVISIO	ON OF OIL, GAS, AND MIN	NING	5. LEASE DESIGNATION	AND SERIAL NO
		ICES AND REPORTS C		6. IF INDIAN, ALLOTTEE	OR TRIBE NAME
ī.	OIL GAS OTHER			7. UNIT AGREEMENT NA	MB
2.	NAME OF OPERATOR			8. FARM OR LEASE NAM	•
	W. C. Kirkwood Oil	and Gas		ļ	
8.	ADDRESS OF OPERATOR			9. WBLL NO.	
	P. O. Drawer 3439	Casper. WY 82602			
4.	LOCATION OF WELL (Report location cl See also space 17 below.) At surface		State requirements.*	10. FIELD AND POOL, OF	WILDCAT
	Wells located in To Ranges 14 & 15 East	ownships 31 and 32 So ;	outh	11. SEC., T., B., M., OR B SURVEY OR AREA	LE. AND
14.	PERMIT NO.	15. BLEVATIONS (Show whether DF,	RT, GR, etc.)	12. COUNTY OR PARISH	18. STATE
16.	Check Ap	propriate Box To Indicate N	ature of Notice, Report, or C	)ther Data	
	NOTICE OF INTENT	FION TO:	DERRUG	ENT REPORT OF:	
		PULL OR ALTER CASING	WATER SHUT-OFF FRACTURE TREATMENT	REPAIRING W	<u> </u>
		BANDON*	SHOOTING OR ACIDIZING	ABANDONMEN	<b>T</b> *
		HANGE PLANS	(Other) Well Status	5	
	(Other)		(NOTE: Report results Completion or Recompl	of multiple completion of etion Report and Log for	m.)
17.	DESCRIBE PROPOSED OR COMPLETED OPER	RATIONS (Clearly state all pertinent	details, and give pertinent dates,	including estimated date	of starting any

7. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones perbnent to this work.)

The wells described on the enclosed list are located within the Hatch Canyon Federal Oil and Gas Unit. This unit is located within the Tar Sand Triangle Special Tar Sand Area. All operations within the Hatch Canyon Unit have been suspended pending conversion of the federal leases within the unit to Combined Hydrocarbon Leases. Thus all operations on these wells have been suspended until conversion has taken place. At that time an additional Sundry Notice will be submitted outlining future activities involving these wells.

1 6 1384 1 1 6 1384

William C. Kirkwood #14-36 Technology 2076' FWL 746' FSL Sec 36 Twp 31S R 14E Garfield County, Utah G.L. 4823' Spudded 6/23/80 4621 T.D. 6/25/80 Deepened 7/1/80 T.D. 7/12/80 1000' William C. Kirkwood #33-29 Cromwell 2023' FEL 741' FSL Sec 29 Twp 31S R 15E Garfield County, Utah G.L. 5120 Spudded 7/5/80 700' T.D. 7/8/80 William C. Kirkwood #23-8 Magnum 1934' FEL 1667' FSL Sec 8 Twp 31S R 15E Garfield County, Utah G.L. 5084 7/17/80 Spudded 1100' 7/22/80 T.D. William C. Kirkwood #22-20 Monroe 2962' FEL 1790' FNL Sec 20 Twp 31S R 15E Garfield County, Utah G.L. 4988 7/9/80 Spudded 800' 7/15/80 T.D. William C. Kirkwood #14-15 Remington 554' FWL 697' FSL Sec 15 Twp 31S R 15E

Garfield County, Utah

8/1/80

8/3/80

1540'

G. L. 5307'

Spudded

T.D.

William C. Kirkwood #14-15 Garfield 4497' FWL 599' FSL Sec 15 Twp 31S R 15E Garfield County, Utah G.L. 5321' Spudded 8/4/80 T.D. 8/6/80 1000' William C. Kirkwood #21-15 Winfield 2222' FWL 481' FNL Sec 15 Twp 31S R 15E Garfield County, Utah G.L. 6127' Spudded 8/12/80 T.D. 8/14/80 1800' William C. Kirkwood #44-4 White Rim 401' FEL 1498' FSL Sec 4 Twp 31S R 15E Garfield County, Utah G.L. 6005' Spudded 8/14/80 1640' T.D. 8/16/80 William C. Kirkwood #34-16 State 699' FSL 1842' FEL Sec 16 Twp 31S R 15E Garfield County, Utah G.L. 5058' Spudded 8/22/80 8/24/80 620' T.D. William C. Kirkwood #34-16 Hatch Canyon Unit SWSE 16-31S-15E 699' FSL 1842' FEL Spudded 8/22/80 T.D. 620' G.L. 5058'

William C. Kirkwood 34-16A Hatch Canyon Unit SWSE 16-31S-15E 752 FSL 1789 FEL

Spudded 10/6/80

T.D. 440'

G.L. 5058'

William C. Kirkwood 34-16B Hatch Canyon Unit SWSE 16-31S-15E 805' FSL 1736' FEL

Spudded 6/21/81

T.D. 800'

G.L. 5058'

William C. Kirkwood 34-16C Hatch Canyon Unit SWSE 16-31S-15E 699' FSL 1736' FEL

Spudded 12/19/81

T.D. 500'

G.L. 5058'

William C. Kirkwood 34-16C Hatch Canyon Unit SWSE 16-31S-15E 805' FSL 1842' FEL

Spudded 6/12/82

T.D. 510'

G.L. 5058'

## SUBMIT IN TRIPLICATE\* (Other instructions on reverse side)

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OUR GAS AND MINING

DIVIS	SION OF OIL, GAS, AND I	MINING	5. LEASE DESIGNATION AND SERIAL NO.
			U-21037 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NO	TICES AND REPORTS	ON WELLS	O. IF INDIAN, ALLOTTEE OR TRIBE NAME
	CATION FOR PERMIT—" for such	g back to a different reservoir. h proposals,)	N/A
·			7. UNIT AGREEMENT NAME
WELL WELL OTHER			Hatch Canyon
NAME OF OPERATOR			8. PARM OR LEASE NAME
William C. Kirkwood			Garfield
			141-13
<ul> <li>LOCATION OF WELL (Report location</li> </ul>	WY 82602 clearly and in accordance with a	ny State requirements.*	10. FIELD AND POOL, OR WILDCAT
See also space 17 below.) At surface			Wildon
		ļ	11. SEC., T., B., M., OR BLK. AND
599' FSL 4497' FWL			
			Sec. 15, T31S, R15E
2. PERMIT NO.	15. BLEVATIONS (Show whether	DF, RT, GR, etc.)	12. COUNTY OR PARISH 18. STATE
43=017-30092	5321' GL	1	Garfield UT
6. Check A	appropriate Box To Indicate	Nature of Notice, Report, or Ot	her Data
NOTICE OF INTE	ANTION TO:	RUPEREUR	NT REPORT OF:
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING WELL
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING CABING
SHOOT OR ACIDIZE	ABANDON*	SHOOTING OR ACIDIZING	ABANDON MENT*
REPAIR WELL	CHANGE PLANS	(Other)	f multiple completion on Well
	Charles to the all posts	Completion or Recomplet	tion Report and Log form.)
proposed work. If well is direct	ionally drilled, give subsurface lo	cations and measured and true vertical	depths for all markers and zones perti-
,		1 · ·	
		\	
This well is locat	ed in the Hatch Cany	yon Unit. All operation	ns in this unit have
been suspended pen	ding the conversion	of Federal Oil and Gas	leases within this
Unit to Combined H	vdrocarbon leases.	Once these leases are o	converted a new
Onite to companied in	jarooarbon roadoo.		
Combined Hydrocarb	on Unit will be form	ned and operations resum	ned. Until that time
77 1 1	-1		
this well has been	snut in and tempora	arrity abandoned.	The state of the s
		(1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
		ق : م€ فرنسه الله الله الله الله الله الله الله ال	JAN 17 1985
		ľ.	246.
		OH V	YOUN OF
OIL GAS WELL OTHER  RACE OF OPERATOR  WILL WELL GAS OF OPERATOR  WILL WELL GAS OF OPERATOR  WILL GAS OF OPERATOR  WILL GAS OF OPERATOR  D. O. BOX 3439 Casper WY 82602  Location of well (Report location clearly and in accordance with any State requirements.*  At surface  WILL GAS OF OPERATOR  D. O. BOX 3439 Casper WY 82602  Location of well (Report location clearly and in accordance with any State requirements.*  At surface  WILL GAS OF WELL (Report location clearly and in accordance with any State requirements.*  WILL GAS OF STATE OF STA		AS & MINING	
8. I hereby certify that the foregoing	As true and correct		
TX III T/H	antennin TITLE	Geologist	DATE 1-4-85
SIGNED /			DAIN
(This space for Federal or State of	lice uffe)		
APPROVED BY			DATE
COMPLITIONS OF APPROVAL, IF	ANA:		









DOGM 56-64-21 an equal opportunity employer

355 West North Temple, 3 Triad Center, Suite 350, Salt Lake City, Ut 84180-1203. ●(801-538-5340)

Operator name and address:

Page of	Page	1_	of	
---------	------	----	----	--



MONTHLY OIL AND GAS PRODUCT	TION REPORT
	Va 1 Hydrocarbon
and address:	* Combined Hydrocarbon

		*HA	TCH 2	YNUNIT		* Open Filed	Daner
	<ul><li>KIRKWOOD, WILLIAM C.</li><li>P O BOX 3439</li></ul>	ాల్లో కేంద	STATE OF STA	ಎಕ್. ಟ್ರಾಪ್ಕ್ ಕ್ರಾಪ್ಕ್ ಪ್ರಾಪ್ತ್ ಪ್ರಾಪ್ತ್	energenetics of the fi	Utah Account No	N3260
	CASPER WY	82602				Report Period (Mont	/ h/Year)1 / 89
	ATTN: AUDREY FISHER					Amended Report	
						] Amended Neport	
	Well Name	Producing	Days	Production	Volume		
	API Number Entity Location		Oper	Oil (BBL)		Gas (MSCF)	Water (BBL)
1	REMINGTON 14-15 Comp. 1-30-80 1301730086 09645 318 15E 15	SWSW WHRM #		-50W	U-21037	7	
Į	/INFIELD 21-15 /L-y- 9-30-80 301730087 <del>-09645</del> 315 15E 15	NENW :	11015	- Sow	Ü-21037		
Ĺ	MONROE 22-20 (*******) 9-30-80 301730088 <del>09645</del> 315 15E 20	SENW.	11016	- కంట	4-21477	9-29-89 227	Jusesa / BAM
L	14 14 14 14 14 14 14 14 14 14 14 14 14 1	NESW WHRM	11017	-ടംധ	U-21478	Ones has a boo	d. they son
1	1301730090 09645 31S 15E 29	SWSE WHRM #	11018	-sow	U-21476	us. to PA 4	Fed Love
į	#HITE RIM 44-4 Comp 9-30-80		11019		U-21083	wells. Will p	aboly news
L	1301730092 09645 318 15E 15	SESE	11020		4-21037	produce.	0
L	1301730096 <del>09645</del> 315 15E 16		11021	SOW	ML-27138		
L	301730098 0 <del>9645</del> 315 15E 16 ,	SUSE WHRM	11022	-SOW	mL-27/38	St. Leas	S
Ĺ	NATCH CANYON U 34-16B <i>仁元(石路</i> N301730107 <del>09645</del> 31S 15E 16 FECHNOLOGY 14-36	SWSE	11623		ML-27/38		
	301730085 10929 31S 14E 36	WHRM		- SOW	(not in Uni	+ /	
						**************************************	
		T	OTAL				
L	omments (attach separate sheet if neces			9645	ok. No 1	A.s.n Unit	•
	9-25-89 All wells	Current	ر ، اب حر	w" st	utus's fi	c.L	
4	3-017-3008le is the only well that			nlity 91			
1	have reviewed this report and certify the	information	to be	<i>i</i> accurate an	d complete.	Date	
1	3					Talanhana	
Ā	uthorized signature					Telephone	

OPERATOR WILLIAM C. KIRKWOOD ADDRESS \_\_\_ P. O. BOX 3439 CASPER, WYOMING 82602

OPERATOR ACCT. NO. N 3260

Phone No. <u>(801 ) 538-5340</u>

ACTION CODE	CURRENT	NEW	API NUMBER	WELL NAME							
CODE	ENILIY NO.	ENTITY NO.		TELL NAME	QQ	SC	WELL TP	LOCATIO		SPUD	EFFECTI
D	9645	11020	43-017-30092	GARFIELD 44-15	SESE	15	315	15E	COUNTY	DATE	DATE
WELL 1 CO	OMMENTS:	** HAT	CH CANYON UNIT	T TERMINATED EFFECTIVE 9-18 ENTITY NUMBERS. ONLY WELL W	-89. ALL	WELLS	WITH IS 4	<u> </u>		RE SOW AI	9-18-8 ND NOW
D	9645	11021	43-017-30096	STATE 34-16	SWSE	16	31S	15E	T		<del></del>
WELL 2 CO	MMENTS:		<u> </u>			10	212	13E	GARFIELD		9-18-8
ELL 3 COM	MENTS:		43-017-30098	STATE 34-16A	SWSE	16	318	15E	GARFIELD		9-18-8
D	9645	11023	43-017-30107	HATCH CYN U 34-16B		<del></del> r	<del></del>				
ELL 4 COM	HENTS:	L		mion cin o 34-10B	SWSE	16	31S	15E	GARFIELD		9-18-8
					T 1	T		1			7
LL 5 COMP	IENTS:										
B - A C - R	dd new well	to existing to	n back of form) or new well (single ng entity (group on e existing entity (	r unit well)					LISHA ROMER	80	
E - 0	ther (expla	in in comme	ents section)	On Code was selected				_	ADMIN. ANAI	YST	9-29-8 Date

NOTE: Use COMMENT section to explain why each Action Code was selected.

(3/89)

Bureat of Land Management Branch of Fluid Minerals (U-922) 324 South State Street Salt Lake City, Utah 84111-2303

93170 (13-912)

Scotemar 20, 1900

CERTIFIED PAIL -- Lotorn Receipt Regulated

Hilliam C. Zirkwood P.D. Drawer 3474 Casper, Wyceing B76021

Gentlemen:

Pursuent to our letter of August 8, 1989, the Indefinite suspension of Section S drilling obligations within the Majeb Canyon Unit Area was lifted September 11, 1979. A copy of our August 8, 1989, correspondence and the Certified Return foccion is enclosed for your reports.

As a result of the findefinite suspension terms lifted, the Match Campon Unit Agreement, Canffeld County, Utah, automatically terminated, effective September 16, 1988, pursuant to the last paragraph of Section 2 of the Unit Agreement.

Copies of this letter are being distributed so the appropriate Federal agencies. It is requested that you furnish notice of this termination to each working interest owner, lesses, and lossor.

In accordance with 62 CFR 1105.1, you say request a State Director Review of this Sociation. Any party adversely affected by a State Director Review may appeal to the Interior Board of Land Appeals as stated in AV CFR 1165.4.

Sincerely,

Orig. Sgd: J.A. Fouts

ACTING

Chief. Breach of Fluid Minerels

bcc: OH Cedar City
Hatch Canyon Usit File
Agr. Sec. Chron
Fluid Chron
U-042
Utal State Land Soard
NASSRPP

Micoulthard: JW29/19/19 01287



### United States Department of the Interior



### BUREAU OF LAND MANAGEMENT RICHFIELD DISTRICT OFFICE 150 EAST 900 NORTH RICHFIELD, UTAH 84701

3162.3-4

(U-052)

March 25, 1991

CERTIFIED MAIL No. P437 740 244 Return Receipt Requested

Mr. William C. Kirkwood (132607)
Drawer 3439
Casper, Wyoming 82602

Dear Mr. Kirkwood:



MAR 2 7 1991

DIVISION OF OIL GAS & MINING

Lease U-21307 automatically terminated on September 1, 1990 due to failure to make timely payments as required in 43 CFR 3103.2-2. The records in this office indicate that the following wells on this lease are unplugged:

Well No. 14-15, SW1/4SW1/4  $43-017-30086-21515E^{H15}$  SOW Well No. 21-15, NE1/4NW1/4  $43-017-30087-21515E^{H15}$  SOW Well No. 44-15, SE1/4SE1/4  $43-017-30092-21515E^{H15}$  SOW

These wells are located in T. 31 S., R. 15 E., Section 15 in Garfield County, Utah. A notification that this office has received from the State of Utah indicates that four (4) shallow, unplugged holes are associated with Well No. 14-15.

If you have records indicating the status of these wells is other than unplugged, please notify this office immediately. Otherwise, as the recognized operator and responsible party, you shall prepare a proposal as a Sundry Notice to permanently plug and abandon all the referenced wells in a timely manner. These Sundry Notices shall be submitted to this office within thirty (30) days from receipt of this letter.

Depending on your response, you may want to jointly inspect these wells with my staff. If you have any questions in this matter, please contact Michael Jackson at (801) 896-8221.

Sincerely

Jerry W. Goodman District Manager

Enclosure: Form 3160-5

cc: LORT--Raymond Joeckel 200 16th Street Denver, CO 80202

U-922 HMRA DOGM Form 3160-5 (June 1990)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

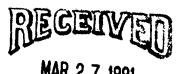
Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE	7. If Onit of CA, Agreement Designation
1. Type of Well	
Oil Gas Well Other	8. Well Name and No.
2. Name of Operator	
	9. API Well No.
3. Address and Telephone No.	•
	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)	
	11. County or Parish, State
12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF N	NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF	ACTION
Notice of Intent  Subsequent Report  Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing Other	Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off  Conversion to Injection  Dispose Water  (Note: Report results of multiple completion on Well  Completion or Recompletion Report and Log form.)
3 Describe Proposed or Completed Operations (Clearly state all per	deant desired	

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*



DIVISION OF OIL GAS & MINING

. I hereby certify that the foregoing is true and correct			
Signed	Title	Date	<del></del>
(This space for Federal or State office use)			
Approved by	Title	Date	

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



### United States Department of the Interior

### BUREAU OF LAND MANAGEMENT RICHFIELD DISTRICT OFFICE 150 EAST 900 NORTH RICHFIELD, UTAH 84701



3162.3-4 (U-052)

March 25, 1991

CERTIFIED MAIL No. P437 740 244 Return Receipt Requested

Mr. William C. Kirkwood (132607)
Drawer 3439
Casper, Wyoming 82602

Dear Mr. Kirkwood:

RECEIVE

MAR 2 7 1991

DIVISION OF OIL GAS & MINING

Lease U-21307 automatically terminated on September 1, 1990 due to failure to make timely payments as required in 43 CFR 3103.2-2. The records in this office indicate that the following wells on this lease are unplugged:

Well No. 14-15, SW1/4SW1/4 43-017-30086

Well No. 21-15, NE1/4NW1/4 43-0/7-30087

Well No. 44-15, SE1/4SE1/4 43-0/7-30092

These wells are located in T. 31 S., R. 15 E., Section 15 in Garfield County, Utah. A notification that this office has received from the State of Utah indicates that four (4) shallow, unplugged holes are associated with Well No. 14-15.

If you have records indicating the status of these wells is other than unplugged, please notify this office immediately. Otherwise, as the recognized operator and responsible party, you shall prepare a proposal as a Sundry Notice to permanently plug and abandon all the referenced wells in a timely manner. These Sundry Notices shall be submitted to this office within thirty (30) days from receipt of this letter.

Depending on your response, you may want to jointly inspect these wells with my staff. If you have any questions in this matter, please contact Michael Jackson at (801) 896-8221.

Sincerely

Jercy W. Goodman District Manager

Enclosure: Form 3160-5

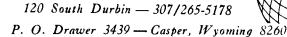
cc: LORT--Raymond Joeckel 200 16th Street

Denver, CO 80202

U-922 HMRA DOGM

Ç

### WILLIAM C. KIRKWOOD



& Gas Exploration & Production

June 3, 1991

Bureau of Land Management Richfield District Office 150 East 900 North Richfield, UT 84701

MEGBUVEU

AUG 2 6 1991

DIVISION OF OIL GAS & MINING



JUN 5 1991

		1	
	1	1	
		Ş	

Attention: Michael Jackson

Re: Hatch Canyon Unit

Well # 14-15, 21-15, 44-15

Sec. 15, T31S, R15E Garfield County, UT

Gentlemen:

Enclosed please find Sundry Notices for plugging three wells in the Hatch Canyon Unit located in Section 15.

With regard to your concern of the four shallowed unplugged holes associated with the #14-15 well: Kirkwood has no record of any such wells, however, we do have a five spot pattern located in Section 16 (copies of location plot and completion reports enclosed). This pattern could possibly be what they are talking about.

If I can be of further assistance, please advise.

Sincerely,

Robert Kirkwood

Engineer

RK/mm

Enclosures

RECEIVED

AUG 2 6 1991

DIVISION OF OIL, GAS & MINING Form 3160-5 (June 1990)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FOI	rm appr	OVED
Budget B	ureau No	. 1004-0135
Expire	s: March	31, 1993

### 5. Lease Designation and Serial No.

Do not use this form for proposals to dr	AND REPORTS ON WELLS rill or to deepen or reentry to a different reservoir.	U-21037  6. If Indian, Allottee or Tribe Name
Use "APPLICATION FO	R PERMIT—" for such proposals	NA
SUBMIT	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well		Hatch Canyon Unit
Oil Gas Well Other		8. Well Name and No.
2. Name of Operator		#44-15
William C. Kirkwood	d and the state of	9. API Well No.
3. Address and Telephone No.		43-017-30092
P. O. Box 3439 Casp	per, WY 82602 (307)265-5178	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey D	escription)	Wildcat
599' FSL 4497' FWI	J	11. County or Parish, State
Sec 15, T31S, R15E		Garfield, UT
12. CHECK APPROPRIATE BOX(	s) TO INDICATE NATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	X Abandonment	Change of Plans
	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
Changed to NOI, 8/23/91	Other	Dispose Water
M. Jachan	BLM	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
3. Describe Proposed or Completed Operations (Clearly state all	pertinent details, and give pertinent dates, including estimated date of starting	
give subsurface locations and measured and true vertice	al depths for all markers and zones pertinent to this work.)*	
Kirkwood proposes t	to abandon the 44-15 well as fol	lows:
1. Pressure test of	casing to 200 PSI for 15 minutes	

- 2. Mix and set 20' surface plug.
- 3. Screw 4½" dry hole marker into 4½" production casing.
- 4. Reseed location as necessary.

OF UTAH DIVISION OF OIL, GAS, AND MINING

BECEINED

AUG 2 6 1991

DATE: 8-CO THOUSE BY: JAY atthous

DIVISION OF OIL, GAS & MINING

4.	Signed Signed	Alian die 101	With	a conjunt
_	2.8.100 €			
			C	

Title Engineer

 $D_{ate} = 6/3/91$ 

(This space for Federal or State office use)

Approved by Acar Al O attached Conditions of approval, if any:

Title Stray Status Many

- Date 4/23/91

SEE ATTACHED

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## CONDITIONS OF APPROVAL SUNDRY NOTICE (DATED 6/3/91)

Company: William C. Kirkwood

Well No.: 44-15

Location: Section 15, T. 31 S., R. 15 E., SLM

Lease No.: U-21037

### General Conditions:

1. All lease operations shall be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100 and 3160, Onshore Oil and Gas Orders, the approved application for permit to drill, and this Sundry Notice.

- The operator is fully responsible for the actions of its subcontractors.
- 3. A copy of this approved Sundry Notice shall be shall be available at the well site for the operator and/or subcontractors.
- 4. The operator or contractor shall contact the Henry Mountains Resource Area, BLM, at least forty eight (48) hours prior to access, plugging and/or reclamation activities. Contact Francis Rakow, Area Geologist, at (801) 542-3461.
- 5. You are requested to plug the well within 60 days of receipt of this approval or notify this office for reason of delay.
- 6. Within thirty (30) days following completion of well abandonment, the lessee or operator shall file a Subsequent Report of Abandonment on Form 3160-5 in accordance with 43 CFR 3160. Upon completion of reclamation operations, the lessee or operator shall notify the authorized officer when the location is ready for inspection via a Final Abandonment Notice on Form 3160-5. Final abandonment shall not be approved until the surface reclamation required by the approved drilling permit has been approved by the BLM. Please file these forms with the District Manager, Richfield District Office, BLM.

### Subsurface Conditions:

- Spacer fluid shall be a mininum 9.0 ppg (pounds per gallon) fresh water and bentonite.
- 2. Surface plug shall be a minimum of 50 feet in length.



DIVISION OF OIL, GAS & MINING



## DIVISION OF OIL. GAS & MINING

William C. Kirkwood Well 44-15, U-21037

3. The operator shall contact the Petroleum Engineering Technician, Cedar City District Office, at least forty-eight (48) hours prior to pressure testing of any casing string and mixing and setting the spacer fluid and surface plug. Contact Theron Mitchell, PET, at:

(801) 586-2401 Cedar City District Office

(801) 586-2719 Home

If cannot reach at above, call:

(801) 826-4291 Escalante Resource Area

(801) 826-4347 After work hours

#### Surface Conditions:

- 1. The drill site shall not be bladed.
- 2. Rock cairns on the access road shall be left intact, if present.
- 3. Upon completion of plugging and abandonment operations, the reserve pit shall be covered, the site shall be disked, and the following seed mixture shall be hand broadcasted over the site:

Species	<u>lbs/acre</u>
Shadscale	3
Indian ricegrass	3
Galleta grass	2

- 4. All trash and debris shall be carried off-site and disposed in a landfill approved by the BLM.
- 5. Access to the site shall be confined to the existing road. Blading, only if necessary, shall be kept to a minimum by removing only those rocks and debris blocking the road and by filling any washed out areas. Blading, if necessary, shall not exceed the width of the existing road berm and road surface. The road shall not be widened.
- 6. The entire project shall be covered by the following protective measures:
  - a. No off-road driving shall be authorized. Four-wheel drive vehicles shall be restricted to existing roads.
  - b. No uranium mining claim markers, or cairns, shall be destroyed nor damaged.
- 7. As required in 43 CFR 3162.6(d), the well shall be marked with a permanent monument with the following information: well number, name of the operator, lease serial number, and surveyed location (quarter-quarter section, section, township and range).
- 8. If access requires use of roads through Glen Canyon National Recreation Area, authorization, if necessary, must be obtained with a Special Use Permit from the National Park Service.

	5	Dai	ta,	
ROUTING AND TO	ransmittal si	.IP 8	123/9	9/
O: (Name, office symbol, rebuilding, Agency/Post)			Initials	Date
. Frank M	allhues			
D061				
STATE OF W	CTAN , Divi	sind Oil	Sax E	MiNN
. 3Tried Co	enter E	ste 2	50	
54C, D	4127-12	03		
Action	X File		tote and Rei	
Approval	For Clearance For Correction		repare ser	<b>E</b>
As Requested	For Your Info		See Me	401
Circulate	Investigate	410	Sikneturene	
Comment	Justify	AUG	<del>~ 0  77 </del>	
Coordination REMARKS		40000	SION OF	302
Enclosed C PLA J3 w	ells on	BLM	Land	6.
also, incl to wells talked to	an Sec. Yew ab	out.	hech	relate I'd
Gill pul a l	sall if G	gulet	oncurrences.	disposals,
DO NOT use this form	learances, and sin	nilar actions		
FROM: (Name, org. symb	ol, Agency/Post)	•	Room No.	-Blag. N-Richt
michal Ja	Chom			6-8221
5041-102		OPTIONAL I Prescribed by FPMR (41 CFR	FORM 41 (F GSA ) 101-11.206	lev. 7–76)

\* U.S. GPO: 1988 — 241-174

Form 3160-5 (J#ne 1990)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.

U-21037

### SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT—" for such proposals

6. If Indian, Allottee or Tribe Name

OSE AFFEIGATION FOR FERMIT— TO SUCH Proposals	NA
SUBMIT IN TRIPLICATE	7. If Unit or CA, Agreement Designation
I. Type of Well  Soli Gas Well Well Other	Hatch Canyon Unit 8. Well Name and No.
2. Name of Operator William C. Kirkwood	#44-15 9. API Well No.
3. Address and Telephone No.	43.017.30092
P. O. Box 3439 Casper, WY 82602 (307)265-5178	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)	Wildcat
599' FSL 4497' FWL	11. County or Parish, State
Sec 15, T31S, R15E	Garfield, UT

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	Abandonment	Change of Plans
	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
<b>1779</b>	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
Changed to NOI, 8/23/91	Other	_ L.J Dispose Water
M. Jackson,		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
Describe Described on Consolered Occasions (Clauses et al.)	15	

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Kirkwood proposes to abandon the 44-15 well as follows:

- 1. Pressure test casing to 200 PSI for 15 minutes.
- Mix and set 20' surface plug.
- 3. Screw 45" dry hole marker into 45" production casing.
- 4. Reseed location as necessary.

REGIME

NOV 2 7 1991

DIVISION OF OIL GAS & MINING

4. I hereby cortify that the foregoing is true and correct Signed Will William	Title	Engineer	Date _	6/3/91
(This space for Federal or State office use)  Approved by Lan About Conditions of approval, if any:	Title	seking Dutiet Man	Date_	6/23/91
SEE ATTACHE	D	•		

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

### CONDITIONS OF APPROVAL SUNDRY NOTICE (DATED 6/3/91)

Company: William C. Kirkwood

Well No.: 44-15

Location: Section 15, T. 31 S., R. 15 E., SLM

Lease No.: U-21037

#### General Conditions:

1. All lease operations shall be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100 and 3160, Onshore Oil and Gas Orders, the approved application for permit to drill, and this Sundry Notice.

- 2. The operator is fully responsible for the actions of its subcontractors.
- 3. A copy of this approved Sundry Notice shall be shall be available at the well site for the operator and/or subcontractors.
- 4. The operator or contractor shall contact the Henry Mountains Resource Area, BLM, at least forty eight (48) hours prior to access, plugging and/or reclamation activities. Contact Francis Rakow, Area Geologist, at (801) 542-3461.
- You are requested to plug the well within 60 days of receipt of this approval or notify this office for reason of delay.
- 6. Within thirty (30) days following completion of well abandonment, the lessee or operator shall file a Subsequent Report of Abandonment on Form 3160-5 in accordance with 43 CFR 3160. Upon completion of reclamation operations, the lessee or operator shall notify the authorized officer when the location is ready for inspection via a Final Abandonment Notice on Form 3160-5. Final abandonment shall not be approved until the surface reclamation required by the approved drilling permit has been approved by the BLM. Please file these forms with the District Manager, Richfield District Office, BLM.

#### Subsurface Conditions:

- 1. Spacer fluid shall be a mininum 9.0 ppg (pounds per gallon) fresh water and bentonite.
- 2. Surface plug shall be a minimum of 50 feet in length.

William C. Kirkwood Well 44-15, U-21037

3. The operator shall contact the Petroleum Engineering Technician, Cedar City District Office, at least forty-eight (48) hours prior to pressure testing of any casing string and mixing and setting the spacer fluid and surface plug. Contact Theron Mitchell, PET, at:

(801) 586-2401 Cedar City District Office

(**801**) 586-2719 Home

If cannot reach at above, call:

(801) 826-4291 Escalante Resource Area

(801) 826-4347 After work hours

### Surface Conditions:

- 1. The drill site shall not be bladed.
- Rock cairns on the access road shall be left intact, if present.
- 3. Upon completion of plugging and abandonment operations, the reserve pit shall be covered, the site shall be disked, and the following seed mixture shall be hand broadcasted over the site:

Species	<u>lbs/acre</u>
Shadscale	3
Indian ricegrass	3
Galleta grass	2

- 4. All trash and debris shall be carried off-site and disposed in a landfill approved by the BLM.
- 5. Access to the site shall be confined to the existing road.
  Blading, only if necessary, shall be kept to a minimum by
  removing only those rocks and debris blocking the road and by
  filling any washed out areas. Blading, if necessary, shall not
  exceed the width of the existing road berm and road surface. The
  road shall not be widened.
- 6. The entire project shall be covered by the following protective measures:
  - No off-road driving shall be authorized. Four-wheel drive vehicles shall be restricted to existing roads.
  - No uranium mining claim markers, or cairns, shall be destroyed nor damaged.
- 7. As required in 43 CFR 3162.6(d), the well shall be marked with a permanent monument with the following information: well number, name of the operator, lease serial number, and surveyed location (quarter-quarter section, section, township and range).
- 8. If access requires use of roads through Glen Canyon National Recreation Area, authorization, if necessary, must be obtained with a Special Use Permit from the National Park Service.

## 'ATE OF UTAH DIVISION C.: OIL, GAS AND MINING

DIVISION C. OIL, CAS AND MINN	144		
,,,,		5. Lease Designation and Serial Number:	
		U-21037	
SUNDRY NOTICES AND REPORTS	ON WELLS	6. If Indian, Allottee or Tribe Name:	
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.  Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.		7. Unit Agreement Name: Hatch Canyon Unit	
1. Type of Well: OIL \( \bigcirc \text{ GAS } \bigcirc \text{ OTHER:} \)		8. Well Name and Number:  Garfield 44-15	
2. Name of Operator: WILLIAM C. KIRKWOOD		9. API Well Number: 4301730092	
3. Address and Telephone Number: P. O. BOX 3439 CASPER, WY 82602	-3439	10. Field and Pool, or Wildcat:	
4. Location of Well Footages: 599' FSL, 4497' FWL QQ, Sec., T., R., M.: SESE Sec 15, T31S, R15E	County: Garfield State: Utah		
11. CHECK APPROPRIATE BOXES TO INDICATE N	NATURE OF NOTICE, REPO	ORT, OR OTHER DATA	
NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)		
☐ Abandonment ☐ New Construction	☐ Abandonment *	□ New Construction	
☐ Casing Repair ☐ Pull or Alter Casing	Casing Repair	☐ Pull or Alter Casing	
☐ Change of Plans ☐ Recompletion	☐ Change of Plans	☐ Shoot or Acidize	
☐ Conversion to Injection ☐ Shoot or Acidize	☐ Conversion to Injection	☐ Vent or Flare	
☐ Fracture Treat ☐ Vent or Flare	Fracture Treat	☐ Water Shut-Off	
☐ Multiple Completion ☐ Water Shut-Off	Other		
Other			
	Date of work completion		
		and Recompletions to different reservoirs on WELL DLOG form.	
	* Must be accompanied by a cement verifi	st be accompanied by a cement verification report.	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and covertical depths for all markers and zones pertinent to this work.)  The above referenced well was plu of the BLM in August, 1992.			
DEC 2 1 1992			
DIVISION OF			
13. Name & Signature	Title: Engineer	Date: 12/18/92	

(This space for State use only)

The second programmer and the second second

Form 3160-5 (June 1990)	DEPARTMEN BUREAU OF	TED STATES IT OF THE INTERIOR LAND MANAGEMENT	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993  5. Lease Designation and Serial No. U-21037
SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  Use "APPLICATION FOR PERMIT—" for such proposals			6. If Indian, Allottee or Tribe Name
SUBMIT IN TRIPLICATE			7. If Unit or CA, Agreement Designation
1. Type of Well  X Oil Gas Well Other  2. Name of Operator			Hatch Canyon Unit  8. Well Name and No.  #44-15  9. API Well No.
William C. Kirkwood  3. Address and Telephone No.  P. O. Box 3439, Casper, WY 82602 307 265-5178  4. Location of Well (Footage, Sec., T., R., M., or Survey Description)			43-017-30092 10. Field and Pool, or Exploratory Area Wildcat 11. County or Parish, State
599' FSL, 4497' FWL Sec. 15, T31S, R15E			Garfield, UT
	APPROPRIATE BOX(	s) TO INDICATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
Notice Subsequ	of Intent uent Report Abandonment Notice	Abandonment  Recompletion  Plugging Back  Casing Repair  Altering Casing  Other	Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off  Conversion to Injection  Dispose Water (Note: Report results of multiple completion on We Completion or Recompletion Report and Log form
give subsurface loc	ations and measured and true vertice at the at	Il pertinent details, and give pertinent dates, including estimated date of starting cal depths for all markers and zones pertinent to this work.)*  Dove referenced well has been plugged as ready for final inspection.	
		DIV. OF	OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct Signed Man	Tide Engineer	Date 10/25/99
(This space for Federal or State office use)		
Approved by	Title	Date

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statem or representations as to any matter within its jurisdiction.

Fax Cover

This is a confidential message, intended solely for the person to whom it is addressed. If you receive this message in error, please forward it to the correct person, or mail it back to us. Thank you.

To

Carol Daniels

Fax No.

801-359-3940

From

Robert Kirkwood

Date/Time

11/4/1999 at 9:22AM

Subject

Utah well P & A dates

**Pages** 

I, including this one

TECO

Carol:

The P&A dates you requested are as follows;

Monroe 22-20

10/7/99

Magnum 23-8

10/8/99

Cromwell 33-29

10/9/99

White Rim 44-31

10/5/99

Technology 14-36

10/8/99

Garfield 44-15

8/19/92

(TA Stort)

Remington 14-15

8/19/92

Winfield 21-15

8/18/92

If you need more information please let me know.

307 265-5178

Fax 307 265-1791